

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	("6355412").PN.	USPAT	OR	OFF	2006/01/19 18:46
S4	31	francis near2 stewart.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 18:48
S5	18	youming near2 zhang.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 18:47
S6	1	joep near2 muyrers.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 19:08
S7	3	joep near2 muijrers.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 19:59
S11	1229140	homology arm	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:06
S13	572	recombinogenic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:08
S14	347246	bacteria\$2 OR coli	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:04
S15	121	S13 same S14	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:04
S17	128	homology adj arm	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:06
S19	127	recombinational adj cloning	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:06
S20	51	S19 same S14	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:07
S21	15	S19 with S14	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:12

S22	0	S20 same S17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:07
S23	1	S20 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:07
S24	0	S15 same S17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:08
S25	18	S15 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:10
S26	50	et adj cloning	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:11
S27	10	et adj recombination	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:12
S28	48	S26 and S14	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:11
S29	21	S26 same S14	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/01/19 20:11

FILE 'MEDLINE, EMBASE, CAPLUS, BIOSIS' ENTERED AT 11:39:47 ON 20 JAN 2006

L1 27 S HOMOLOGY ARM
L2 161 S RECOMBINATIONAL CLONING
L3 0 S L1 AND L2
L4 1913 S RECOMBINOGENIC
L5 3191660 S BACTERIA? OR COLI
L6 412 S L4 (P) L5
L8 143 S L4 (S) L5
L9 0 S L6 AND L1
L10 0 S L7 AND L1
L11 0 S L6 AND L2
L12 26 S ET CLONING
L13 50 S ET RECOMBINATION
L14 17 DUP REM L12 (9 DUPLICATES REMOVED)
L15 23 DUP REM L13 (27 DUPLICATES REMOVED)
L16 22 S L15 NOT L14
L17 4 S L14 AND PY<=1999
L18 5 S L16 AND PY<=1999
L19 5938 S L5 (P) (HOMOLOGOUS RECOMBINATION)
L20 1108 S L19 (P) (CLONE OR CLONING OR ENGINEER?)
L21 31 S L20 (P) (RECE OR RECT)
L22 17 DUP REM L21 (14 DUPLICATES REMOVED)
L23 7 S L22 AND PY<=2000

AU Vassaux, Georges
SO Gene Therapy (1999), 6(3), 307-308
CODEN: GETHEC; ISSN: 0969-7128
TI New cloning tools for the design of better transgenes
AB A review, with 10 refs., on development of a more flexible bacterial system for cloning (ET cloning) using homologous recombination, previously used advantageously in yeast systems. ET cloning relies on RecE and RecT proteins and will permit more efficient and sophisticated strategies for gene therapy.

AU Muyrers J P; Zhang Y; Testa G; Stewart A F
SO Nucleic acids research, (1999 Mar 15) 27 (6) 1555-7.
Journal code: 0411011. ISSN: 0305-1048.
TI Rapid modification of bacterial artificial chromosomes by ET-recombination.
AB We present a method to modify bacterial artificial chromosomes (BACs) resident in their host strain. The method is based on homologous recombination by ET-cloning. We have successfully modified BACs at two distinct loci by recombination with a PCR product containing homology arms of 50 nt. The procedure we describe here is rapid, was found to work with high efficiency and should be applicable to any BAC modification desired.

AU Angrand P O; Daigle N; van der Hoeven F; Scholer H R; Stewart A F
SO Nucleic acids research, (1999 Sep 1) 27 (17) e16.
Journal code: 0411011. ISSN: 1362-4962.
TI Simplified generation of targeting constructs using ET recombination.
AB ET recombination is a way to engineer DNA in Escherichia coli using homologous recombination. Here we develop the potential of ET recombination in two ways relevant to complex engineering exercises such as building gene targeting constructs. First, a targeting construct was made in a single step. Second, ET recombination was used to place two unique restriction sites at precise positions in a large genomic clone. Subsequently a complex targeting construct was created by ligation with a multifunctional cassette.

AU Ali Imam, A. M.; Patrinos, George P.; De Krom, Mariken; Bottardi, Stefania; Janssens, Rick J.; Katsantoni, Eleni; Wai, Albert W. K.; Sherrett, David J.; Grosveld, Frank G.
SO Nucleic Acids Research (2000), 28(12), e65, ii-vi
CODEN: NARHAD; ISSN: 0305-1048
TI Modification of human .beta.-globin locus PAC clones by homologous

- recombination in *Escherichia coli*
- AB We report here modifications of human .beta.-globin PAC clones by homologous recombination in *Escherichia coli* DH10B, utilizing a plasmid temp. sensitive for replication, the *recA* gene and a wild-type copy of the *rpsL* gene which allows for an efficient selection for plasmid loss in this host. High frequencies of recombination are obsd. even with very small lengths of homol. and the method has general utility for introducing insertions, deletions and point mutations. No rearrangements were detected with the exception of one highly repetitive genomic sequence when either the *E. coli* RecA- or the lambdoid phage encoded RecT and RecE-dependent recombination systems were used.
- AU Zhang, Youming; Muyrers, Joep P. P.; Testa, Giuseppe; Stewart, A. Francis
 SO Nature Biotechnology (2000), 18(12), 1314-1317
 CODEN: NABIF9; ISSN: 1087-0156
- TI DNA cloning by homologous recombination in *Escherichia coli*
 AB The cloning of foreign DNA in *Escherichia coli* episomes is a cornerstone of mol. biol. The pioneering work in the early 1970s, using DNA ligases to paste DNA into episomal vectors, is still the most widely sued approach. Here we describe a different principle, using ET recombination, for directed cloning and sub-cloning, which offers a variety of advantages. Most prominently, a chosen DNA region can be cloned from a complex mixt. without prior isolation. Hence cloning by ET recombination resembles PCR in that both involve the amplification of a DNA region between two chosen points. We apply the strategy to subclone chosen DNA regions from several target mols. resident in *E. coli* hosts, and to clone chosen DNA regions from genomic DNA prepns. Here we analyze basic aspects of the approach and present several examples that illustrate its simplicity, flexibility, and remarkable efficiency.
- AU Zhang Y; Buchholz F; Muyrers J P; Stewart A F
 SO Nature genetics, (1998 Oct) 20 (2) 123-8.
 Journal code: 9216904. ISSN: 1061-4036.
- TI A new logic for DNA engineering using recombination in *Escherichia coli*.
 AB A straightforward way to engineer DNA in *E. coli* using homologous recombination is described. The homologous recombination reaction uses RecE and RecT and is transferable between *E. coli* strains. Several target molecules were manipulated, including high copy plasmids, a large episome and the *E. coli* chromosome. Sequential steps of homologous or site-specific recombination were used to demonstrate a new logic for engineering DNA, unlimited by the disposition of restriction endonuclease cleavage sites or the size of the target DNA.